



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,668	07/09/2003	Bruce G. Johnson	10012473-3	2599
7590 11/15/2005			EXAMINER	
HEWLETT-PACKARD COMPANY			TRAN, LY T	
Intellectual Property Administration			ART UNIT	
P. O. Box 272400			PAPER NUMBER	
Fort Collins, CO 80527-2400			2853	

DATE MAILED: 11/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary

Application No.

10/616,668

Applicant(s)

JOHNSON, BRUCE G.

Examiner

Ly T. TRAN

Art Unit

2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 33, 37-41 and 43-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 53-58 is/are allowed.
- 6) ☒ Claim(s) 33, 37-41, 43-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 33, 38-41, 51 are rejected under 35 U.S.C. 102(b) as being anticipate by Takei (EP 530627).

With respect to claims 33, 41 and 51, Takei discloses a method of printing with an ink jet comprising:

- A supply of ink liquid ink comprising a carrier fluid (Fig.4: element 23C, M Y)
- An ink jet head using the ink for printing images on a transfer belt (column 11: line 45) that is adjacent to the print head and moveable with respect to the print head (Fig.4, Abstract);
- Absorbing carrier fluid from ink of the image with the transfer member (since the transfer member has a absorbing layer, it will absorb carrier fluid from ink of the image)
- Heating the transfer member (Column 5: line 45-49)

- The transferring the printed image from the transfer member to a sheet of the print medium (Fig.4: element S); and since there is charge includes in the embodiment of figure 4, therefor this method does not includes applying a charge to a surface of the carrier fluid on the transfer member.
- Wherein the transfer member is a transfer belt (Column 11: line 44-45) and the method further comprises absorbing carrier fluid from ink of the image with the transfer belt (Column 5: line 45-49)

With respect to claim 38, Takei discloses ink jet head comprises a page width array (Fig.4: element 23).

With respect to claim 39, Takei discloses cleaning the transfer member after transfer of the image to the sheet of the medium (Fig.4: element 22)

With respect to claim 40, Takei discloses a pinch roller for facilitating transfer of an image from the transfer member to the sheet of print medium (Fig.4: element 25).

With respect to claim 43, Takei discloses that wherein the electrical charge facilitates transfer of the images to the print medium (Column 10: line 1-10)

With respect to claims 44 and 52, Takei discloses an ink jet printing system comprising:

- Ink comprising a carrier fluid (Fig.1: element 1)
- An ink jet head (Fig.8: element 53) using the ink for printing images on a transfer member (Fig.8: element 51) that is adjacent to the print head and moveable with respect to the print head.

- The transfer member disposed to transfer an image to the print medium (Fig.8: S)
- Wherein the electrical charge facilitates transfer of the images to the print medium (Column 10: line 1-10)

With respect to claim 45, Takei discloses the transfer member comprises a transfer belt (Column 11: line 44-46)

With respect to claim 46, Takei discloses transfer member comprises a drum (Fig.8: element 51).

With respect to claim 49, Takei discloses a pinch roller for facilitating transfer of an image from the transfer member to the medium (Fig.8: element 55).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 37 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takei (EP 530 627).

Takei in the embodiment 4, figure 4 discloses the claimed invention except that using full line head instead of scanning head. Takei in embodiment 3, figure 3 shows that full line head and scanning head is an equivalent structure known in the art.

Therefore, because full line head and scanning head were art recognized equivalents at

the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute scanning head for full line head for the same purpose of ejecting ink.

3. Claims 48, 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takei (EP 530 627).

Takei in embodiment 8, figure 8 fails to teach a cleaning roller for cleaning the transfer member and heating element for heating the transfer member.

Takei in embodiment 4 teach the cleaning roller (Fig.4: element 22) for cleaning the transfer member and heating element (figure 4: element 27) for heating the transfer member.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a cleaning roller and the heating element as taught by Takei in embodiment 4. The motivation of doing so is to remove residual ink on the transfer roller and release absorbed water on the transfer member.

Allowable Subject Matter

4. Claims 53-58 are allowed.

The primary reason for the allowance of claim 53-58 is the inclusion of the limitation of method of printing with an ink jet printing system comprising adjusting a speed of movement of the transfer member to maximize evaporation of the carrier fluid. It is limitation found in each claims, as it is claimed in the combination, that has not been

found, taught, or suggested by the prior art of record which makes these claims allowable over the prior art.

Response to Arguments

Applicant's arguments filed 8/26/05 have been fully considered but they are not persuasive.

Applicant argues that Takei does not teach that the electrical charge facilitates transfer of the images to the print medium. This argument does not seem to be persuasive because Takei teaches the electrical charge that causes the ink transfer onto the recording medium (Column 10: line 1-10). Applicant argues that the electrical charge only causes the image to adhere more strongly to the transfer member rather than facilitating the transfer to the print medium. This argument does not seem to be persuasive because by using the electrical charge in Takei, the pigment concentration of the ink on the transfer drum is increased, the ink is transferred onto the recording medium (Column 10: line 1-10).

Applicant argues that Takei does not teach heating the transfer belt. This argument does not seem to be persuasive because figure 3 and figure 4 show the heater 27 heats the transfer roller 21. Also referring to column 11: line 44-45, Takei teaches that the transfer member can be a transfer drum or transfer belt. Therefore, Takei teaches heating the transfer belt.

Note: the claim 52 is rejected by Takei in the previous office action on page 4.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

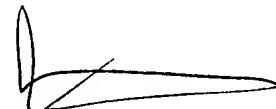
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ly T. TRAN whose telephone number is 571-272-2155. The examiner can normally be reached on M-F (7:30am-5pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on 571-272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LT

November 9, 2005

A handwritten signature in black ink, appearing to read 'Stephen D. Meier', with a long horizontal stroke extending to the right.

Stephen D. Meier
Primary Examiner